

## INTERNATIONAL SEARCH REPORT

PCT/IB 03/03115

A. CLASSIFICATION OF SUBJECT MATTER  
 IPC 7 G02F1/1347 G02F1/1334

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
 IPC 7 G02F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, INSPEC, COMPENDEX

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 796 454 A (MA YAO-DONG) 18 August 1998 (1998-08-18) column 11, line 38 -column 13, line 9; figures 8A,8B	5-7
X	US 6 144 359 A (GRAVE DUANE A) 7 November 2000 (2000-11-07) column 2, line 30 -column 4, line 44; figures 1-3	5-7
X	WO 97 01789 A (MINNESOTA MINING & MFG) 16 January 1997 (1997-01-16) page 18, line 12 -page 21, line 25; figures 9-11	5,6
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

## ° Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
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- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

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\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

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\*S\* document member of the same patent family

Date of the actual completion of the international search

30 October 2003

Date of mailing of the international search report

06/11/2003

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 693 560 A (WILEY RICHARD) 15 September 1987 (1987-09-15) column 3, line 41 -column 9, line 15; figures 1,3,4 -----	1-4
X	PATENT ABSTRACTS OF JAPAN vol. 008, no. 109 (P-275), 22 May 1984 (1984-05-22) & JP 59 017530 A (TOKYO SHIBAURA DENKI KK), 28 January 1984 (1984-01-28) abstract and figure -----	1-4

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5796454	A	18-08-1998	NONE	
US 6144359	A	07-11-2000	NONE	
WO 9701789	A	16-01-1997	US 5686979 A AU 5964696 A BR 9608641 A CA 2224324 A1 EP 0835475 A2 JP 11508377 T WO 9701789 A2	11-11-1997 30-01-1997 29-06-1999 16-01-1997 15-04-1998 21-07-1999 16-01-1997
US 4693560	A	15-09-1987	CA 1264846 A1 EP 0283506 A1 JP 1501255 T WO 8802499 A1	23-01-1990 28-09-1988 27-04-1989 07-04-1988
JP 59017530	A	28-01-1984	NONE	